A CASE
OF
UNIVERSAL PURULENT DEPOSITION
INTO THE JOINTS,

WITH
SEPARATION OF THE EPIPHYSES;

OCCURRING AS A SEQUEL TO SMALL POX.

By HENRY ANCELL, Esq.,
SURGEON TO THE WESTERN GENERAL DISPENSARY.

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SOPHIA MIDDLETON, the daughter of a poor woman, was nourished partly at the breast and partly on farinaceous food, and although pale in the face, and somewhat weakly and backward, enjoyed good health until above eleven months old, her flesh being at this age mottled and firm, and her limbs strong, so that she could support her own weight upon the ground.

At this time the child fell ill with the small pox, the eruption came out very full, but was distinct, and the crusts fell off about the tenth day. At the decline of the eruption, the whole body swelled, but in a short time it became very rapidly emaciated. About three days after the crusts had fallen off, she appeared to suffer violent pain on the slightest motion, and swellings were observed over the clavicle,

and upon the joints of the elbows, wrists, and knees. This took place upon the thirteenth day from the first appearance of the eruption, and three days afterwards she was presented as a patient at the Dispensary. The history was given by the mother, who further observed, that she was passing enormous quantities of fetid and high-coloured urine.

The child presented a most pitiable aspect, being emaciated and deadly pale, and loaded with recent cicatrices from desquamation after small pox. There were large, pale, cold, more or less circumscribed fluctuating swellings, streaked with blue veins, around the elbow, wrist, and knee joints, on the inside of the left ankle, and over the articulation of the right clavicle with the scapula. The swelling on one wrist was larger than an ordinary sized hen's egg, and on pressing the finger towards its centre, it appeared to contain a hard foreign body with an abrupt edge. Very distinct crepitation was observable in various situations in all the affected joints. The knees presented to the hand a sensation exactly as if the bones had been crushed under some considerable weight. A distinct grinding of two surfaces of bone could be produced about an inch below the head of the left tibia. Crepitation was also felt at the articulation of the ribs with the vertebræ. The deposition into the joints continued to increase for ten days; the smaller joints of the carpus, metacarpus, and phalanges became involved in the disease, and the ends of the bones appeared to separate more and more from each other. An abrupt edge of bone was perceptible

through the skin, one third the distance from the condyles towards the head of the right os humeri. Strabismus and other cerebral symptoms supervened, and in a few days afterwards the child died.

On dissecting the left knee, a considerable quantity of fat was found under the cutis, and the muscles of the thigh and leg were pale, small, and flabby; on opening the capsular ligament, the parts within were found to be surrounded by thin pus to the amount of about three ounces, the purulent fluid extending a third the length of the femur upwards and a considerable distance down the tibia; the body of the femur was separated from its epiphysis; the osseous portion of the epiphysis was quite separate from the cartilaginous portion, and a large portion of the surface of the latter presented a dull and slightly granulated appearance, as if worm-eaten; the cartilages and ligaments of the joint were undistinguishable. The head of the tibia presented similar phenomena, being distinctly separated from the body of the bone by a stratum of pus. There was no appearance of morbid vascularity either in the bones or in the capsular ligament.

On opening the calvarium, about six ounces of limpid fluid escaped from between the membranes of the brain, and a small quantity was found within the ventricles. The brain and its membranes were free from morbid vascularity.

The remaining viscera and joints were not examined, in consequence of strong objections urged by the mother.

The above is a well marked case of a pathological condition, which has been more frequently alluded to by authors, than described. The older writers mention a separation of the epiphyses as a frequent consequence of small pox in children, and as a symptom of scurvy, and Morgagni gives an instance of an experienced surgeon having mistaken a case of this kind for fracture. Many of the latest writers omit to enumerate this affection of the joints, either as a symptom of the secondary fever or as a consequence of small pox.

This affection is usually slighter and more partial than in the instance above related and the patients generally recover; two cases of the kind occurred to Mr. Anderson, Surgeon to the Dispensary. I have thought that the universal lesion of the joints, and the opportunity which was afforded of inspecting one of them after death, in this particular case, would render it interesting to the Society.

Albion Street,
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